Example Problem 6A-10_2: Design a Stop Sign Island for a Skewed Intersection

Case 1: Right-skewed Intersection

Given:

Right-skewed intersection between two-lane roadways.

Two-way stop controlled intersection.

Intersection design vehicle - WB-67.

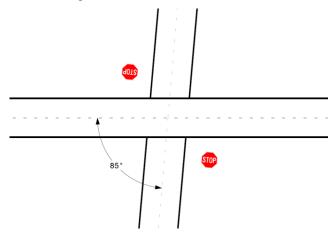


Figure 1: Intersection with two-way stop control.

Solution:

Design the island

1. Locate the face of the island near the mainline and approach lane.

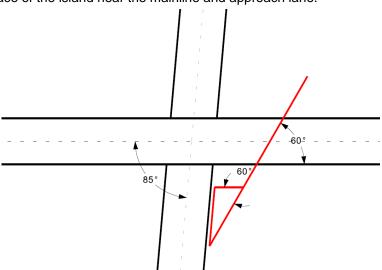


Figure 1: Intersection with two-way stop control.

2. Check the area and clearance to the sign(s) within the island.

Quick Tips:

 Intersections with acute angles less than 75 degrees are usually realigned to be perpendicular. Refer to Section 6A-08 for guidance.

Case 2: Left-skewed Intersection

Given:

Left-skewed intersection between two-lane roadways.

Two-way stop controlled intersection.

Intersection design vehicle - WB-67.

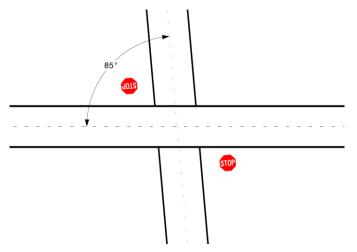


Figure 3: Left-skewed intersection with two-way stop control.

Solution:

Design the interior angle of the island

1. Locate the face of the island near the mainline and approach lane.

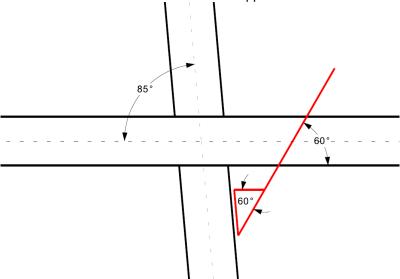


Figure 4: Intersection with two-way stop control.

2. Check the area and clearance to the sign(s) within the island.